



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,026	01/16/2004	Raymond L. Chong	21-004.C1	8498
22898	7590	08/08/2007	EXAMINER	
ISHIMARU & ZAHRT LLP 333 W. EL CAMINO REAL SUITE 330 SUNNYVALE, CA 94087			WU, CHENG CHIEN	
		ART UNIT	PAPER NUMBER	
		2609		
		MAIL DATE	DELIVERY MODE	
		08/08/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/760,026	CHONG, RAYMOND L.
	Examiner	Art Unit
	CHENG-CHIEN WU	2609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 16 January 2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1,3-10,14,15,17-22 and 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,3-10,14,15,17-22 and 25 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 16 January 2004 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date. _____	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

1. Claims 1-25 of U.S. Application 10/760026 were filed 1/16/2004. Claims 2, 11-13 and 23-24 have been cancelled, and claims 1, 3-10, 14, 15, 17-22 and 25 are presented for examination.

***Claim Objections***

Regarding the preliminary amendment, Claim 14 is missing in a complete listing of all claims and their status on January 16, 2004. Verify and correct as required.

***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 6-10, 15, 17 and 18 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5-9, and 13-15 of U.S. Patent No. 6,738,353. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant invention are fully anticipated by the claims of the US Patent 6,738,353.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. **Claims 1, 3-6, 8-10, 14-15, 17-22 and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Goodman** (US Paten #7173910 B2) in view of **Jaworski** (Pub US#20030163772 A1).

**Regarding Claim 1, Goodman** teaches a communications network, comprising:  
a voice band tester (VBT) (Fig. 1, voice quality test probe 14b) coupled to the MTS  
(Fig.1 VOIP gateway 16a, can be later replaced by the teaching of Jaworski for MTS),  
the VBT being located at a first location (Fig. 1, 14b), the modem tester (Fig. 1, 14a)  
adapted to provide a first communication signal to the VBT (Fig. 1, 14b) via the MTS  
(column 3, lines 54-62); and

a Voice over Internet Packet (VoIP) monitoring device (Fig. 2, manager 44)  
coupled to the MTS (Fig. 2. inside of VoIP network) and the VBT (Fig. 2, TP1, 38; or  
Fig. 1, 14b), the VoIP monitoring device adapted to monitor the first communication  
signal, and calculate a first Quality of Services (QoS) score based on traffic density  
between the MTS and the VBT (column 7, lines 12-22);

wherein the VBT (Fig. 2, can be TP1 38) is adapted to: calculate a first  
Transmission Impairment Test (TIT) (column 6, 53-60) score based on the first  
communication signal and a first received communication signal received by the VBT  
from the modem tester, and provide the first TIT score to the VoIP monitoring device  
(column 6, lines 21-46).

However, Goodman does not specifically teach a modem tester coupled to the  
modem termination system (MTS).

In the same field of endeavor, **Jaworski** teaches a modem termination system (Fig.1, The CMTS 10 acts as an interface between the Internet backbone 12 and the Hybrid Fiber Coax network, [0003], lines 6-7), a modem tester coupled to the MTS, the modem tester being located at a second location remote from the first location (Fig 3, the tester 32 can connect as it can be connected at almost any point in the coaxial portion of the HFC network or any of the coaxial connections inside subscriber's home 22, [0020], lines 1-9).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention to modify the system of Goodman with the system of Jaworski for adding a modem termination system and a modem tester because it can make the measurement of the upstream channel without disabling the network during testing and be able to determine that problems detected are a result of the upstream channel and not the downstream channel and not have errors in the downstream negatively affect measurement accuracy of the upstream channel.

**Regarding claim 3, Goodman and Jaworski teach the claimed invention as applied to claim 1 above,** and in addition **Goodman** further teaches the first communication signal and the first received communication signal include TIT files (column 3, lines 55-57).

**Regarding claim 4, Goodman and Jaworski teach the claimed invention as applied to claim 1 above,** and in addition **Goodman** further teaches the first TIT

(column 6, 53-60) score is a score selected from the group consisting of Perceptual Speech Quality Measurement (PSQM) score and Perceptual Evaluation of Speech Quality (PESQ) score; and the TIT files are files selected from the group consisting PSQM files and PESQ files (column 3, lines 32-51; page 2, in other publications section, mentioned PESQ).

**Regarding claim 5, Goodman and Jaworski teach the claimed invention as applied to claim 1 above,** and in addition **Goodman** further teaches the first QoS score is determined based on factors selected from a group consisting of packet losses, jitter, and delays in the transmission of the first communication signal from the modem tester to the VBT (column 1, lines 19-27).

**Regarding claim 6, Goodman and Jaworski teach the claimed invention as applied to claim 1 above,** and in addition **Goodman** further teaches the first communication signal contains a special code detectable by the VoIP monitoring device, and the VoIP monitoring device begins to monitor signal transmissions from the modem tester to VBT via the MTS once the special code is detected (column 2, lines 26-34; column 7, lines 12-22).

**Regarding claim 8, Goodman and Jaworski teach the claimed invention as applied to claim 1 above,** and in addition **Goodman** further teaches the VoIP monitoring device (Fig. 2, manager 44) is adapted to provide the first PSQM score, and

the first QoS score to the MTS for storage (column 2, lines 26-34; column 6, lines 3-7; column 7, lines 12-22).

**Regarding claim 9, Goodman and Jaworski teach the claimed invention as discussed above with respect to claim 1, except for a Broadband Termination Interface (BTI) coupled to the MTS, the BTI adapted to convert broadband signals to signals selected from a group consisting of television, packetized data, video, voice, and a combination thereof.**

**Jaworski further teaches further comprising:** a Broadband Termination Interface (BTI) coupled to the MTS, the BTI adapted to convert broadband signals to signals selected from a group consisting of television, packetized data, video, voice, and a combination thereof (Fig. 1, [0003], lines 6-13).

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of Goodman with the system of Jaworski for adding a modem termination system and a modem tester because it can make the measurement of the upstream channel without disabling the network during testing and be able to determine that problems detected are a result of the upstream channel and not the downstream channel and not have errors in the downstream negatively affect measurement accuracy of the upstream channel.

**Regarding claim 10, Goodman and Jaworski teach the claimed invention as discussed above with respect to claim 1, except for the modem tester is integrated with the BTI.**

**Jaworski further teaches further wherein the modem tester is integrated with the BTI (Fig. 4, [0021], lines 5-9).**

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the system of Goodman with the system of Jaworski for adding a modem termination system and a modem tester because it can make the measurement of the upstream channel without disabling the network during testing and be able to determine that problems detected are a result of the upstream channel and not the downstream channel and not have errors in the downstream negatively affect measurement accuracy of the upstream channel.

**Regarding claim 14, the claim lists all the same limitations of claim 1, but in Voice over DSL form via a DSL Multiplexer communication network that offers significant improvement in data transfer as cable network and requires a modem system. Therefore, the supporting rationale of the rejection to claim 1 applies equally as well as claim 14.**

**Regarding claim 15,** the claim lists all the same limitations of claim 1, but in method form rather than apparatus form. Therefore, the supporting rationale of the rejection to claim 1 applies equally as well to claim 15.

**Regarding claim 17,** the claim lists all the same limitations of claim 6. Therefore, the supporting rationale of the rejection to claim 6 applies equally as well to claim 17.

**Regarding claim 18,** the claim lists all the same limitations of claim 7. Therefore, the supporting rationale of the rejection to claim 7 applies equally as well to claim 18.

**Regarding claim 19,** the claim lists all the same limitations of claim 5. Therefore, the supporting rationale of the rejection to claim 5 applies equally as well to claim 19.

**Regarding claim 20, Goodman and Jaworski teach the claimed invention as applied to claim 15 above,** and in addition Goodman further teaches predicting a TIT score based on a QoS score (column 2, lines 26-34); informing a user of the communications network that services to the communications network may be needed to restore signal transmission quality if the TIT score is below a minimum TIT score (column 7, lines 12-22).

**Regarding claim 21,** the claim lists all the same limitations of claim 3.

Therefore, the supporting rationale of the rejection to claim 3 applies equally as well to claim 21.

**Regarding claim 22,** the claim lists all the same limitations of claim 4.

Therefore, the supporting rationale of the rejection to claim 4 applies equally as well to claim 22.

**Regarding claim 25,** the claim lists all the same limitations of claim 14, but in method form rather than apparatus form. Therefore, the supporting rationale of the rejection to claim 14 applies equally as well to claim 25

7. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Goodman** (US Paten #7173910 B2) as modified by **Jaworski** (Pub US#20030163772 A1) and applied to claim 1 above and in further view of **Chiles et al.** ("Chiles") (Pub US#20010036192 A1).

**Regarding Claim 7, Goodman and Jaworski** teach all of the limitations as applied to claim 1 above. However, Jaworski and Goodman do not teach the MTS is part of a network system selected from a group consisting of a wired network system, a wireless network system, and a combination thereof.

In the same field of endeavor, **Chiles** teaches the MTS is part of a network system selected from a group consisting of a wired network system, a wireless network system, and a combination thereof (Fig. 1, [0043], lines 1-4; Fig. 4, [0056], lines 18-21).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention to combine the teachings of Jaworski and Goodman with the teaching of Chiles because without recognition of or distinction among devices and their users, the individual client devices and users of the client devices may not be able to access and receive back from the host certain host-maintained preferences, such as personal identification settings, personal web pages, account information, wallet information, and financial information.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hyodo et al. (US Patent #5715239) discloses ATM multiplex transmission system having test equipment.

Sanderson (US Patent #6292468 B1) discloses Method for qualifying a loop for DSL service.

Leung (Pub #US 2002/0087711 A1) discloses Calling service of a VoIP device in a VLAN environment.

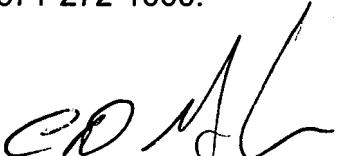
### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHENG-CHIEN WU whose telephone number is (571) 270-1217. The examiner can normally be reached on Monday-Friday 8:00-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHARLES GARBER can be reached on (571) 272-2194. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cheng-Chien Wu  
Patent Examiner  
August 3, 2007



CHARLES D. GARBER  
SUPERVISORY PATENT EXAMINER